

Children's Mental Health FY 2008 Task 11
Family-Directed Structural Therapy Training and Outcome Measures Project
Year End Report
June 2008

EXECUTIVE SUMMARY

During FY 2004 and 2005, University of Kansas staff and Area Mental Health Center conducted an evaluation of a therapeutic wilderness family camping program which utilized Family-Directed Structural Therapy (FDST) as a therapeutic modality. FDST is a goal-oriented, time limited modality which enables families to quickly identify strengths and areas of concern. It includes a corresponding assessment tool that asks family members to rate five relationship dynamics, or *core issues*, seven *roles*, and various *external stressors*. Promising results from the camp study led to application of the model in a more traditional CMHC setting in FY 2006. During this time, certain Community Based Services (CBS) providers at Pawnee Mental Health Services (PMHS) and Johnson County Mental Health Center (JCMHC) were trained in the model with a favorable response.

During FY 2007-2008, training and supervision continued, and outcomes were collected from families with whom FDST trained service providers used the model. The research design included two teams from PMHS and one team from JCMHC serving as the treatment group, and one team from each CMHC participating as the comparison group. Families in both groups received usual mental health services, with treatment families also receiving FDST. Data were collected at baseline, 3-months post baseline, and 6-month post baseline. Instruments included the FDST assessment tool (treatment families), Family Adaptability and Cohesion Evaluation Scale II (FACES II) (treatment and comparison families), and the Child Behavior Checklist (CBCL) (treatment and comparison children).

Results indicated that treatment adults improved to a statistically significant degree on all five FDST *core issues*, five of seven FDST *roles*, and on the FACES II *cohesion* variable, which measures emotional bonding among family members. All of these gains were maintained throughout the study. Despite these family changes, significant improvement in treatment child functioning was not indicated by the CBCL. Future inquiry will attend to articulation of the relationship between family change and more healthy child behavior. Comparison families did not experience any statistically significant change on FACES II *cohesion* or *adaptability* variables, or on any of the four CBCL subscales.

A qualitative inquiry was also undertaken during FY 2008 to better understand service providers' perceptions of FDST training, supervision, and utilization of the modality. Twenty workers were interviewed, with some of the more common suggestions for improvement including implementation of the model as an outpatient team approach, not only in CBS; increasing ways to reinforce the language of the model with children; and more training regarding utilization of the assessment tool.

In summary, data analysis indicates FDST is promising means by which to strengthen internal family structure. Professionals who utilized the modality appreciated the focus and organization it provided, and administrators were supportive of its utilization. During FY 2009, an outcome study is being undertaken at COMCARE, with the purpose of continuing to build the evidence-base for FDST in “real world” settings.

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BACKGROUND

As a part of FY 2004 and 2005 contracts, University of Kansas staff and Area Mental Health Center (AMHC) conducted an evaluation of a therapeutic wilderness family camping program facilitated by AMHC. In addition to adventure-based programming, the camp utilized Family-Directed Structural Therapy (FDST) as a therapeutic modality. FDST is an approach to family therapy built on traditional concepts of Structural Family Therapy, Strengths Model, and Group Work Theory. It is a goal-oriented, time limited modality which enables the family to quickly identify strengths and areas of concern. It includes a concretely organized, easily administered assessment tool that is completed by adult family members (McLendon, McLendon, & Petr, 2005). Please see Appendix A for a more complete description of FDST.

During these two years, data were collected to evaluate the efficacy of FDST as utilized in this family camp setting. Initial findings were promising in this non-traditional setting, thus for FY 2006, FDST was taken into a more conventional community mental health setting. For a complete report on these findings, see the Children's Mental Health Task 11 FY 2004-2005 Final Report (www.socwel.ku.edu/fdst). A manuscript reporting outcomes of this project has been accepted for publication by *The Journal of Social Work in Mental Health* (McLendon, McLendon, Petr, Kapp, & Mooradian, in press).

During FY 2006, the purpose shifted to teaching FDST and determining if service providers found the model useful. University of Kansas staff trained certain Medicaid Children's Community Based Service (CBS) providers at Pawnee Mental Health Services (PMHS) and Johnson County Mental Health Center (JCMHC). Participating service providers then utilized FDST with selected families on their caseload. Finally, KU FDST staff completed supervision rating scales regarding service provider proficiency with the model; service providers completed surveys measuring their proficiency in the use of the model, as well as their satisfaction with the model and project; and participating families completed project satisfaction surveys. A final report for this FY 2006 training project can also be found at ww.socwel.ku.edu/fdst.

During FY 2007, training and supervision continued, with an added component of family outcome data collection. At PMHS, supervision and training of new staff at the Manhattan CBS office continued. Junction City CBS staff were also trained and supervision was offered every other week (the same frequency with which staff meetings were held). At JCMHC, new Mission CBS staff were trained and supervision was offered on a weekly basis.

Additionally, at both CMHCs, outcome data were collected from families participating in the FDST study, as well as from families who received only usual CMHC services and

did not receive FDST. The purpose of this was to measure the effectiveness of FDST in improving family and child functioning by comparing outcomes from both groups of families. CBS families at the Concordia (PMHS) and Olathe (JCMHC) offices served as comparison families.

During FY 2008, data collection was completed and additional training was provided. At the conclusion of data collection, the Concordia office was trained in the model, as well as all other JCMHC CBS teams, including Olathe, DeSoto, Gardner/Edgerton, Step Ahead, and Blue Valley. During FY 2007, FDST training was expanded from one to two days to provide more thorough explanation of the Family-Directed Structural Assessment Tool. This two-day training model continued during FY 2008.

GOALS AND POPULATIONS SERVED

This project was designed to evaluate the effectiveness of Family-Directed Structural Therapy and its corresponding assessment tool with Seriously Emotionally Disturbed (SED) children and their families, via utilization of the model in conjunction with Medicaid Community-Based Services.

ACTIVITIES TO DATE FY 2008

During FY 2008, 94 additional service providers were trained at the 2 CMHCs. At PMHS, this included 22 case managers, 5 attendant care workers, and 1 team leader. At JCMHC, 24 case managers, 18 outpatient Medicaid therapists, 11 attendant care workers/case management assistants, 7 team leaders, 4 home-based family therapists, and 2 outpatient clinical supervisors completed training. The 56-page FDST training manual developed in FY 2007 continued to be utilized and refined during 2008.

At both CMHCs, family outcome data were collected at baseline (when families entered the CBS system), 3-months post baseline, and 6-months post baseline. For treatment families, data collected at these intervals included the FDST assessment tool and the Family Adaptability and Cohesion Evaluation Scale II (FACES II). The FACES II is a 30 question Likert scale survey which is completed by all family members and is designed to measure family adaptability and cohesion (Olsen, Portner, & Bell, 1983). The Child Behavior Checklist - Parent Version (CBCL), with 118 items specific to child problems, was collected at baseline and 6-months post baseline. For comparison families the FACES II was collected at the three intervals, with the CBCL collected a baseline and 6-months post baseline. A complete description of the data collection process is included in the *Description of Research Project* section of this report. Data collection and initial analysis are complete, with findings reported in the *Results* section of this document.

A Spanish-language version of the Family-Directed Structural Assessment Tool was introduced during FY 2008, as well as a gender neutral version of the assessment tool. A website for the project was initiated through the KU School of Social Welfare, where service providers who have been trained in the model can access project information and download copies of all three versions of the assessment tool. A coloring book which

teaches young children terms specific to the model was also produced and placed on the website in retrievable form. Finally, a DVD was created for use in the two day training. It presents a role play in which the assessment tool is administered, scored, and utilized to create a plan of action for a family.

DESCRIPTION OF RESEARCH PROJECT

Research Questions

Several research questions guided this inquiry:

- General Question: Is FDST effective in improving child and family functioning with outpatient Medicaid CBS populations at these two CMHCs?
 - In order to thoroughly examine this general question, several sub-questions were utilized.
 1. What are the demographic/clinical similarities and differences of the treatment and comparison groups?
 2. Did treatment group adults improve on Family-Directed Structural Assessment Tool *core issue* and/or *role* scores?
 3. Did treatment family functioning improve as indicated by FACES II *Adaptability* and *Cohesion* scores? How does this change contrast with comparison family scores on the same measures?
 4. Did SED treatment child functioning improve as indicated by CBCL scores? How does this change contrast with SED comparison child scores on the same measures?
 5. What improvements can be made to the FDST model, based on experiences of the professionals in the study?

Method

Sample

Participating families were recruited from CBS programs at the 2 CMHCs. The project was explained at intake and families were given the opportunity to participate. Families at the Mission (JCMHC), Manhattan (PMHS), and Junction City (PMHS) offices served as the treatment group, while Olathe (JCMHC) and Concordia (PMHS) were the comparison sites. (See Table I.)

Demographic Characteristics of the Treatment Group

The treatment group consisted of 85 individuals (44 adults, 41 children), representing a total of 26 families. In reference to gender, 40 females and 45 males participated. The mean ages for children and adults were 11.1 years and 38.4 years, respectively. There were nine single-parent and 17 two-parent families. This group was comprised of 76 Caucasian individuals, five African-Americans, and four Hispanic individuals. Seventeen of these families reported an income per year under \$30,000. Six had an income between \$30,001 and \$50,000, and three made over \$50,000.

The SED children in the treatment group received a mean of 6.25 mental health services during the study, amounting to a mean of 91.78 hours of services during that time.

In reference to mental health diagnoses 10 of the 27 SED children in the treatment group were diagnosed with Attention Deficit Hyperactivity Disorder, 4 with some type of Bipolar Disorder, 3 with Oppositional Defiant Disorder/Conduct Disorder, 3 with Mood Disorder NOS, 3 with an Adjustment Disorder, 3 with some form of Autism Spectrum Disorder, and one with Impulse Control Disorder.

Service utilization data was also examined by looking at the four most frequently used services. Psychosocial Group was the most commonly utilized service, with the mean number of hours per treatment child during the six month study reported as 37.1 hours, while Community Psychiatric Support and Treatment (CPST) displayed a mean of 14.8. For Targeted Case Management, treatment children had a mean of 8.1 hours, and Attendant Care showed a mean of 6.8 hours for the treatment group. (Table I summarizes this information for treatment and comparison groups.)

Demographic Characteristics of the Comparison Group

The comparison group consisted of 86 individuals (45 adults, 41 children), with 46 females and 40 males, totaling 25 families. Age ranged from 3-years old to 74-years old, with the mean age of children and adults being 12.1 years and 41.1 years, respectively. Seven families were single-parent, while 18 were two-parent. The comparison group consisted of 85 Caucasians and one Hispanic individual. Eleven families earned under \$30,000 per years, 8 had an income between \$30,001 and \$50,000, and 6 families made over \$50,000 per year.

The SED children in the comparison group received a mean of 6.2 mental health services during the study, amounting to a mean of 122.2 hours of service during that time.

In reference to mental health diagnoses and service utilization, 7 of the 26 SED children in the comparison group were diagnosed with Oppositional Defiant Disorder/Conduct Disorder, 6 with Attention Deficit Hyperactivity Disorder, 3 with some type of Bipolar Disorder, 2 with Mood Disorder NOS, 2 with some type of Autism Spectrum Disorder, 2 with Post-Traumatic Stress Disorder, one with an Adjustment Disorder, one with

Depression, one with Reactive Attachment Disorder, and one with a mood disorder due to a medical condition.

As with the treatment group, Psychosocial Group was the most frequently utilized service, with the mean number of hours per comparison child during the study reported as 67.1. CPST displayed a mean of 16.1 hours for comparison children and TCM averaged 12.9 hours. Finally, Attendant Care showed a mean of 12.7 hours.

Table I: Treatment Family Demographics vs. Comparison Family Demographics

Demographic	Treatment Families	Comparison Families
Number	26 families consisting of 85 individuals <ul style="list-style-type: none"> ○ 41 children (27 SED) <ul style="list-style-type: none"> ○ 28 boys ○ 13 girls ○ 44 adults 	25 families consisting of 86 individuals <ul style="list-style-type: none"> ○ 41 children (26 SED) <ul style="list-style-type: none"> ○ 23 boys ○ 18 girls ○ 45 adults
Child Age	Mean age of 11.1 years Standard Deviation of 3.5 Range 3-17 years	Mean age of 12.1 years Standard Deviation of 3.3 Range of 3-18 years
Adult Age	Mean age of 38.4 years Standard Deviation of 10.4 Range 22-59 years	Mean age of 41.1 Standard Deviation of 12.9 Range 27-74 years
Structure	9 single-parent families 17 two-parent families	7 single-parent families 18 two-parent families
Race	76 Caucasian participants 5 African-American participants 4 Hispanic participants	85 Caucasian participants 1 Hispanic participant
Income	17 families < \$30,000 annually 6 families \$30,001 - \$50,000 3 families > \$50,001 annually	11 families < \$30,000 annually 8 families \$30,001 - \$50,000 6 families > \$50,001 annually
Mean Number of Hours of MH Services During 6-Month Study Period	91.8 Hours of MH Service	122.2 Hours of MH Service

<p>Mean Number of Hours of Other MH Services During 6 -Month Study Period (Based on Four Most Frequently Utilized Services)</p>	<p>n= 27 – only collected on SED children Psychosocial Group – 37.1 hours CPST – 14.8 hours Attendant Care -8.1 hours Targeted Case Management - 6.8 hours</p>	<p>n= 26 –only collected on SED children Psychosocial Group – 67.1 hours CPST – 16.1 hours Attendant Care – 12.9 hours Targeted Case Management – 12.7 hours</p>
<p>Diagnoses</p>	<p>n = 27 - only collected on SED children Attention Deficit Hyperactivity Disorder – 10 (37%) Oppositional Defiant Disorder/Conduct Disorder – 3 (11%) Mood Disorder NOS – 3 (11%) Adjustment Disorder – 3 (11%) Bipolar Disorder – 4 (15%) Autism Spectrum Disorder – 3 (11%) Impulse Control Disorder – 1 (4%)</p>	<p>n=26 – only collected on SED children Attention Deficit Hyperactivity Disorder – 6 (23%) Oppositional Defiant Disorder/Conduct Disorder -7 (27%) Mood Disorder NOS – 2 (7.7%) Adjustment Disorder - 1 (3.8%) Bipolar Disorder - 3 (11.5%) Autism Spectrum Disorder – 2 (7.7%) PTSD – 2 (7.7%) Depression – 1 (3.8%) Reactive Attachment Disorder -1 (3.8%) Mood Disorder Due to Medical Condition – 1 (3.8%)</p>

Clinical Characteristics of Treatment Group

At the baseline administration of the Family-Directed Structural Assessment Tool, 43 adults provided their assessment of *Core Issues*. *Core Issues* were rated on a four-point scale that included “Positive”, scored as a one; “More Positive than Negative” scored as a two; “More Negative than Positive” shown as a three; and “Negative”, which was indicated by a score of four.

Within *Core Issues*, the mean for each variable is as follows: *Commitment*, = 1.7, *Credibility* = 1.9, *Empowerment* = 2.5, *Control of Self* = 2.1, and *Consistency* = 2.2. The 28 adults with spouses/partners rated their opinion of their spouse’s/partner’s core issues on *Core Issues Partner* variables. The mean value for each variable is: *Commitment Partner* = 1.8, *Credibility Partner* = 1.8, *Empowerment Partner* = 2.0, *Control of Self Partner* = 2.0; and *Consistency Partner* = 2.0.

Scores for *Roles* were scored on the same four point scale. Thirty-five to 43 adult participants responded, depending on the roles they occupied. The mean for each role was reported as: *Husband/Partner* = 2.1, *Wife/Partner* = 2.0, *Individual* = 2.1, *Father* = 2.2, *Mother* = 1.8, *Parents* = 2.0, and *Children* = 2.4.

Sixty treatment adults and children responded to the FACES II at baseline. Their mean score was 50.4 on *Cohesion*, and on *Adaptability* the group mean was 40.7.

The first administration of the CBCL obtained scores for 22 SED children. The mean for the each subscale is: *Total Competence* = 32.5, *Internalizing* = 64.3, *Externalizing* = 69.0, and *Total Problem* = 73.9. (Table II summarizes these clinical characteristics.)

Clinical Characteristics of the Comparison Group

Sixty-three comparison adults and children responded to the FACES II at baseline. The group mean for *Cohesion* was 55.2, while the mean score for *Adaptability* was 42.2.

The baseline administration for comparison SED children produced 25 sets of scores. The mean score for each of the subscales were reported as follows: *Total Competence* = 35.8, *Internalizing* = 67.7, *Externalizing* = 72.4, and *Total Problem* = 71.9.

Table II: Mean Clinical Scores for Treatment and Comparison Groups at Baseline

Measure	Treatment Families	Comparison Families
FDST Core Issue: Commitment	1.7 (SD=0.7)	NA
FDST Core Issue: Credibility	1.9 (SD=0.7)	NA
FDST Core Issue: Empowerment	2.5 (SD=1.0)	NA
FDST Core Issue: Control of Self	2.1 (SD=0.8)	NA
FDST Core Issue: Consistency	2.2 (SD=0.7)	NA
FDST Core Issue Partner: Commitment	1.8 (SD=0.8)	NA
FDST Core Issue Partner: Credibility	1.8 (SD=0.9)	NA
FDST Core Issue Partner: Empowerment	2.0 (SD=0.9)	NA
FDST Core Issue Partner: Control of Self	2.0 (SD=0.8)	NA
FDST Core Issue Partner: Consistency	2.0 (SD=0.7)	NA
FDST Role: Husband/Partner	2.1 (SD=0.6)	NA
FDST Role: Wife/Partner	2.0 (SD=0.8)	NA
FDST Role: Individual	2.1 (SD=0.7)	NA
FDST Role: Father	2.2 (SD=0.8)	NA
FDST Role: Mother	1.8 (SD=0.6)	NA
FDST Role: Parents	2.0 (SD=0.7)	NA
FDST Role: Child(ren)	2.4 (SD=0.8)	NA
FACES Cohesion	50.4 (SD=10.2)	55.2 (SD=10.2)
FACES Adaptability	40.7 (SD=8.0)	42.2 (SD=7.8)
CBCL Total Competence	32.5 (SD=16.2)	35.8 (SD=7.9)
CBCL Internalizing	64.3 (SD=17.6)	67.7 (SD=12.6)
CBCL Externalizing	69.0 (SD=17.5)	72.4 (SD=10.7)
CBCL Total Problem	73.9 (SD=10.6)	71.9 (SD=10.0)

Intervention

Service providers at both CMHCs received a 6-hour training in Family-Directed Structural Therapy and the use of the assessment tool. FDST is a time-limited, family-driven helping model which enables families to identify strengths and areas of concern. The corresponding assessment tool allows families and service providers to track changes in functioning, recognizing healthy changes and emerging concerns (McLendon, McLendon, & Petr, 2003). Workers who chose to utilize the model then attended FDST supervision at least twice per month. Once a satisfactory level of proficiency was reached, participants were certified to administer the assessment tool. Appropriate families on their case loads were identified (e.g., no active domestic violence, no acute crises) assessment tool was administered.. Service providers were encouraged to utilize FDST language during every session with study families, and the frequency with which workers used the model’s vocabulary in family sessions was documented. The assessment tool was re-administered to study families every 3 months.

Data Collection

Written consents were collected from all adult participants, parental family members completed consents for their children, and the children completed a verbal child assent. All consents and procedures were approved by the University of Kansas Internal Review Board for Human Subjects Approval.

Baseline data were collected at “Time One” (T1), which occurred at entry into the study. Data were then collected at “Time Two” (T2), which took place 3-months post T1. A final set of data was collected at “Time Three” (T3), which was 6-months post T1.

Adult family members in the treatment group completed the Family-Directed Structural Assessment Tool at T1, T2, and T3. Adults and children in both the treatment and comparison groups completed the Family Adaptability and Cohesion Evaluation Scale II (FACES II) at T1, T2, and T3. The FACES II is a 30 question Likert point scale which was completed by all family members with adequate reading ability (Olsen, Portner, & Bell, 1983). Finally, Child Behavior Checklists – Parent Version (CBCL) were being completed and recorded every 6-months for SED children in both groups. Protocol recommends administration once every 6-months (Achenbach & Rescorla, 2001), and completion of additional CBCLs for the FDST outcome study would have interfered with this. Therefore, CBCLs were collected from the CMHC database as close as possible to T1 and T3. (See Table IV for an outline of data collection.)

Table IV: Summary of Data Collection Process and Timeline

MEASURE/TIME COLLECTED	TREATMENT GROUP ADULT	TREATMENT GROUP CHILD	COMPARISON GROUP ADULT	COMPARISON GROUP CHILD
FACES TIME 1	X	X	X	X
FDST TIME 1	X			
CBCL TIME 1		X		X
FACES TIME 2	X	X	X	X
FDST TIME 2	X			
FACES TIME 3	X	X	X	X
FDST TIME 3	X			
CBCL TIME 3		X		X

Time 1 = Baseline Data Collection; Time 2= 3-Months Post Baseline; Time 3= 6-Months Post Baseline

FDST = Family-Directed Structural Assessment Tool

FACES = Family Adaptability and Cohesion Evaluation Scale, Second Version

CBCL=Child Behavior Check List - Parent Report

RESULTS

Analyses were conducted to evaluate the effectiveness of the FDST intervention in improving family and child functioning. The study compared outcomes for the comparison group receiving “usual” Medicaid CBS services, with the treatment group receiving those usual services plus Family-Directed Structural Therapy and/or the assessment tool.

Family Demographics

Research Question One: What are demographic/ clinical similarities and differences of the treatment and comparison groups?

Similarities and differences between the groups were assessed through tests on the descriptive variables and clinical variables discussed in the *Method* section of this report (pp. 4-9). Tests of significance were selected to match the level of measurement, with Pearson's Chi-Square utilized for categorical variables and Analysis of Variance utilized for continuous variables. There were no significant differences between the groups on *Age, Sex, Family Type, Total Hours of MH Services Received During Study, or Hours of Other MH Services Received During Study*. There was a statistically significant difference between the groups in *Income per Year* (Pearson χ^2 , (1, 171) = 11.14, $p = .004$), with a greater number of comparison group families in higher income brackets. There was also a statistically significant difference between groups on *Race*, Pearson χ^2 (1, 171) = 7.30, $p = .026$, with the treatment group displaying greater racial diversity.

When analyzing for group mean differences, no significant differences were found at baseline for the FACES II *Adaptability* scale. There was, however, a statistically significant difference in the FACES II *Cohesion* scale at baseline, $F(1,156) = 8.26$, $p < .05$, with a mean of 55.2 for comparison families versus 50.4 for the treatment group., indicating that comparison families were, on average, functioning higher on this dimension.

Finally, CBCL scores for SED children in the treatment and comparison groups had no statistically significant differences at baseline.

Change in Treatment Group Family-Directed Structural Assessment Tool Scores

Research Question Two: Did treatment group adults improve on Family-Directed Structural Assessment Tool *Core Issue* and/or *Role* scores?

Changes in treatment group Family-Directed Structural Assessment Tool scores were assessed by comparing the group mean values for each variable over two phases. Baseline scores were compared with those obtained at 3-months post baseline, and 3-month scores were compared with those from 6-months post baseline. Paired samples *t* tests were utilized to examine mean score changes. In order to interpret the scores from the assessment tool, it is necessary to remember that a decrease in score indicates improvement.

There was statistically significant change in all mean *Core Issue* scores from baseline to 3-months post baseline: *Commitment*, $t(36) = 2.33$, $p < .05$; *Credibility*, $t(36) = 2.74$, $p = .01$; *Empowerment*, $t(36) = 2.52$, $p < .05$; *Control of Self*, $t(36) = 2.12$, $p < .05$;

Consistency, $t(36) = 2.67$, $p < .05$. From 3-months to 6-months post baseline there was no statistically significant change, which can be interpreted as maintenance of gains made during the first phase. (See Table V for a summary of scores.)

There were no statistically significant changes in *Core Issue Partner* mean scores, however there were several positive trends ($p = .06$ -.09) from baseline to 3-months. These trends include: *Commitment* (1.8 to 1.5), *Credibility* (1.8 to 1.5), and *Control of Self* (2.0 to 1.8). There were no significant changes or trends during the following 3 months.

Table V: Mean Scores for Core Issues: Baseline, 3-Months Post Baseline, and 6-Months Post Baseline

Core Issue	Baseline	3-Months Post Baseline	6-Months Post Baseline
Commitment	1.7	1.5*	1.4
Credibility	1.9	1.7*	1.5
Empowerment	2.5	2.1*	2.2
Control of Self	2.1	1.7*	1.6
Consistency	2.2	1.8*	1.9
Commitment – Partner	1.8	1.5**	1.4
Credibility - Partner	1.8	1.5**	1.5
Empowerment – Partner	2.0	1.7	2.0
Control of Self – Partner	2.0	1.8**	1.7
Consistency - Partner	2.0	1.7	1.7

Note. 1=Positive; 2=More Positive than Negative; 3=More Negative than Positive; 4=Negative

* Change from Baseline to 3-Months Post Baseline Significant at $p < .05$

** Indicates a trend $p = .06$ -.09

All *Role* scores improved from baseline to 3-months post baseline, with statistically significant change indicated in *husband/partner*, $t(27) = 2.60$, $p < .05$; *wife/partner*, $t(26) = 2.30$, $p < .05$; *individual*, $t(35) = 2.25$, $p < .05$; *father*, $t(30) = 2.35$, $p < .05$; and *parents*, $t(34) = 3.4$, $p < .05$. There were no statistically significant changes from 3-months to 6-months, which can be construed as maintenance of gains made during the first three months. (Table IV outlines the scores.)

Table IV: Mean Scores for Roles: Baseline, 3-Months Post Baseline, and 6-Months Post Baseline

Role	Baseline	3-Months Post Baseline	6 Months Post Baseline
Husband/Partner	2.1	1.7*	1.5
Wife/Partner	2.0	1.5*	1.6
Individual	2.1	1.8*	1.8
Father	2.2	1.8*	1.7
Mother	1.8	1.5	1.6
Parents	2.0	1.6*	1.5
Children	2.4	2.3	2.1

Note. 1=Positive; 2=More Positive than Negative; 3=More Negative than Positive; 4=Negative

*Change from Baseline to 3-Months Post Baseline Significant at $p < .05$

Change in Treatment Group and Comparison Group FACES II

Research Question Three: Did treatment family functioning improve as indicated by FACES II *Adaptability* and *Cohesion* scores? How does this change contrast with comparison family scores on the same measures?

As with changes in Family-Directed Structural Assessment Tool scores, FACES II scores were assessed by comparing the group mean values for *Adaptability* and *Cohesion* over the two phases. Paired samples *t* tests were utilized to examine mean score changes.

In reference to treatment families, changes in *Adaptability* (40.7 – baseline; 42.5 – 3-months; 42.2 – 6-months) did not reach significance. *Cohesion* for treatment families, however, improved to a statistically significant degree from baseline to 3-months, $t(59) = -3.22$, $p < .01$. There was no significant change from 3-months to 6-months (55.2 to 54.7).

Comparison families did not display any significant changes on *Adaptability* (42.2 - baseline; 43.4 – 3-months to 40.8 – 6-months) or *Cohesion* (55.2 – baseline; 54.5 – 3-months; 54.0- 6-months) at any point in the study. (Table VI outlines the scores.)

Table VI: Mean Scores for Adaptability and Cohesion for Treatment and Comparison Families: Baseline, 3-Months Post Baseline, and 6-Months Post Baseline

FACES Measure	Baseline	3-Months Post Baseline	6-Months Post Baseline
Treatment Family Adaptability	40.7	42.5	42.2
Comparison Family Adaptability	42.2	43.4	40.8
Treatment Family Cohesion	51.3	55.2*	54.7
Comparison Family Cohesion	55.2	54.5	54.0

Note. Higher scores are considered to indicate healthier family functioning.

*Change from Baseline to 3-Months Post Baseline Significant at $p < .01$

Change in Treatment Group and Comparison Group SED Children CBCL Scores

Research Question Four: Did SED treatment child functioning improve as indicated by CBCL scores? How does this change contrast with SED comparison child scores on the same measures?

For SED children in both groups, there were no statistically significant changes on any of the four CBCL subscales. For *Total Competence*, treatment children improved from 32.50 to 37.28, while comparison children deteriorated from 35.75 to 33.31. It is important to note that on *Total Competence*, higher scores indicate improved functioning, while on the remaining 3 subscales, lower scores indicate improved functioning. For *Internalizing*, treatment children deteriorated from 64.27 to 70.06, while comparison children experienced a slight change from 67.69 to 67.45. For *Externalizing*, treatment children moved from 68.92 to 71.22, and comparison children changed from 72.42 to 72.35. Finally, for *Total Problem*, treatment children moved from 73.85 to 74.72, and comparison children demonstrated a change from 71.88 to 71.65. (See Table VII for a summary of these findings.)

**Table VII: Mean Scores for CBCL Subscales for Treatment and Comparison Group
SED Children: Baseline and 6-Months Post Baseline**

CBCL Subscale	Baseline	6-Months Post Baseline
Treatment Total Competence*	32.50	37.28
Comparison Total Competence*	35.75	33.31
Treatment Internalizing	64.27	70.06
Comparison Internalizing	67.69	67.45
Treatment Externalizing	68.92	71.22
Comparison Externalizing	72.42	72.35
Treatment Total Problem	73.85	74.72
Comparison Total Problem	71.88	71.65

*On Total Competence, higher scores indicate improvement. On Internalizing, Externalizing, and Total Problem, lower scores indicate improvement.

Research Question Five: What improvements can be made to the FDST model, based on experiences of the professionals in the study?

A qualitative study was undertaken during FY 2008 to better understand service providers' perceptions of FDST training, supervision, and utilization of the modality. Strengths and weaknesses of the model and assessment tool, ways in which they enhance or hinder service delivery, and suggestions for improvement were collected (see Appendix B for questionnaires). Twenty FDST-trained service providers were interviewed by University of Kansas staff between October 2007 and February 2008. All workers were former or current PMHS employees. Interviews were audio recorded, transcribed, and later coded for analysis. Data analysis is presently ongoing however, preliminary observations are presented below.

Thirteen workers reported using FDST and/or the assessment tool frequently in their practice, while 7 service providers chose not to use the modality. Approximately half of those interviewed received the one-day training, while the remainder attended the more intensive two-day training. Of those who used the modality, some utilized FDST language with families even though they were not formally using the assessment tool. Additionally, several service providers had adapted the model to use with children, despite the fact they did not work with the children's parents.

Some service providers indicated there was confusion within their team and/or agency regarding which workers should/ could use the assessment tool. A few reported they felt it was more appropriate for therapists to use FDST, while others believed that case managers can competently utilize the model and assessment tool. Furthermore, several case managers thought the model would be more effective as a team approach, with both case managers and therapists utilizing FDST. It was their opinion, however, this type of implementation was not occurring. Suggestions for improvement included a demonstration of tool administration, as well as increased explanation of scoring.

DISCUSSION AND IMPLICATIONS

The results of this study indicate that over 3-months time, treatment families improved to a statistically significant degree on all FDST *core issues*, five out of seven *roles*, and maintained those gains throughout the study. The same statistically significant trend was observed for treatment families on FACES II *Cohesion*. In reference to comparison families, no significant changes were indicated by any of the measures. These findings indicate positive changes were made in treatment family functioning. Adult family members reported improvement on the FDST measurement specific to *core issues* and *roles*, which suggests the internal family structure was strengthened. This observation is mirrored by the significant advance of treatment family FACES II *Cohesion* scores, with this variable defined as, “The emotional bonding which family members have toward one another” (<http://www.facesiv.com/pdf/2.development.pdf>). Despite these family changes, significant improvement in child functioning was not indicated by the CBCL. Future inquiry will attend to articulation of the relationship between family change and more healthy child behavior, with additional tools being employed for this purpose.

While the generalizability of the findings of this study is limited by a small sample size and non-random assignment of participants, there appear to be some promising trends, as outlined in the previous paragraph. Further investigation utilizing a larger sample size and additional measurement tools could potentially support and strengthen current findings.

Another finding of interest is that the trends in FDST and FACES II score changes are consistent with changes observed in the FY 2004-2005 evaluation of a therapeutic family camp which utilized Family-Directed Structural Therapy. While the sample sizes of both studies are small, and they took place in different therapeutic settings, this trend is one of which to be aware and examine in further research projects.

A noteworthy component of this project is that it specifically focuses on facilitating family involvement in the care of SED children. A significant body of research indicates that when families are involved in the treatment process, outcomes are better for children, and lasting change becomes more likely (Cunningham & Henggeler, 1999; Liddle, 1995; Coatsworth, Santisteban, McBride, & Szapocznik, 2001). The use of Family-Directed Structural Therapy and the assessment tool facilitates family involvement in a strengths-based, non-stigmatizing manner, enabling the family members to determine family strengths and areas of concern.

This project between the University of Kansas School of Social Welfare, Pawnee Mental Health Services, and Johnson County Mental Health Center represents the operationalization of the process President Bush noted in the President’s New Freedom Commission on Mental Health, as “moving from science to service and from the field back to science” (New Freedom Commission on Mental Health, 2003, p.72). Practice-based research, with its emphasis on effectiveness in real world settings, is vital to the development of evidence-based practices that can be readily adopted in agency settings. This collaboration between a University-based research program and two community-

based agencies demonstrates that this “service to science” process can be successfully facilitated, in that service providers using the FDST model were highly satisfied with the training, supervision, and indicated the data collection process was not burdensome, and administrative support was exceptional.

CONCLUSION AND PLANS FOR FY 2009

This preliminary report briefly discusses the history of the Family-Directed Structural Therapy project, past research activities, outlines the current project, and offers initial findings regarding outcome data. The promising trends observed in the current project could be further investigated and potentially supported by inquiry which addresses some of the limitations of the current research design. A final report on the current project is forthcoming, pending complete data analysis.

In FY 2009, the project will move to COMCARE in Wichita, with the purpose of continued inquiry based on findings, trends, and limitations of past research. Design and implementation will build on the FY 2007-2008 project, with improvements stemming from PMHS and JCMHC service provider recommendations, and enhanced research design and measures. Based on worker feedback suggesting ways to reinforce FDST language and concepts to children, as well as a need to more saliently capture the relationship between family change and healthier child functioning, an FDST child measurement tool will be added. In order to begin to make connections between family outcomes and degree of implementation, a tool measuring fidelity of model utilization will be completed by service providers. Additionally, in order to enhance fidelity, use of the model will be a standard and expected intervention with treatment families. Finally, implementation at this large CMHC offers the potential for participation of up to 200 families in each group (treatment and comparison), which increases the validity of any significant findings.

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Appendix A

In Family-Directed Structural Therapy, three conceptual areas (core issues, roles, and external stressors) are rated by adult family members on a scale of 1-4 (1=positive, 2=more positive than negative, 3=more negative than positive, and 4=negative). These scores are then used by the service provider and family to identify strengths and areas of concern. *Core issues* are conceptualized as the fabric of family functioning and consist of commitment, credibility, empowerment, control of self, and consistency. *Roles* scored and discussed are husband/partner, wife/partner, individual (person's functioning irrespective of all other roles), father, mother, parents, and children.

External stressors are dynamics that impact the family from outside the basic internal structure. The effects of these stressors may be positive and supportive or negative and destructive. These external dynamics include: "ex-relationships" (includes ex-spouses, ex-in-laws, ex-significant others), in-laws, parents, grandparents, employment, living conditions, finances, religious/spiritual, legal concerns, social service involvement, hobbies and interests, school and extra-curricular activities, friends, alcohol and drugs, and health care/medical. Finally, there is a framework of interaction that guides interaction and expectation among family members. The *framework of interaction* is comprised of suggested ideas and techniques to aid the family in discussing role identification, boundary clarification, and addressing external stressors and areas of concern.

Appendix B

Questions for Service Providers that Utilized FDST

Purpose: To better understand the strengths and weakness of Family-Directed Structural Therapy and the corresponding assessment tool, ways in which they enhance or hinder service delivery to families of SED children, and suggestions for improvement to both.

1. What FDST training did you receive?
2. How did you perceive the training?
3. How did you view the trainers?
4. Why did you choose to utilize FDST and/or the assessment tool?
5. Did the fact that FDST is being developed an evidence-based practice influence your utilization of the model? If so, how?
6. How did this training fit with your pre-existing ideology, method of practice, and/or values?
7. On average, how many times per month did you attend FDST supervision?
8. With whom did you utilize FDST and/or the assessment tool? Specifically:
 - a. Did you utilize FDST and/or the assessment tool with parents? If so, how often and in what way? (Did it enhance? How?)
 - b. Did you utilize FDST and/or the assessment tool with children? If so, how often and in what way? (Did it enhance? How?)
 - c. Did you utilize FDST and/or the assessment tool with parents and children together? If so, how often and in what way? (Did it enhance? How?)
9. Did FDST and/or the assessment tool hinder your work with parents? If so, how?
10. Did FDST and/or the assessment tool hinder your work with children? If so, how?

11. Did FDST and/or the assessment tool hinder your work with parents and children together? If so, how?
12. What could be done to improve the model?
 - a. Training – length, type, etc.
 - b. Supervision – availability, style, etc.
 - c. Improve core issues?
 - d. Improve roles?
 - e. Improve external stressors?
 - f. Improve family circle and concept of boundaries?
 - g. Improve assessment tool, overall?
13. How does billing structure versus the family focus of the FDST model/assessment tool influence your use of the model?
14. Did you encounter any barriers when utilizing FDST/assessment tool? If so, what were they?
15. What suggestions do you have to address those barriers?

Questions for Service Providers that Did Not Utilize FDST Supervision

Purpose: To better understand the strengths and weakness of Family-Directed Structural Therapy and the corresponding assessment tool, ways in which they enhance or hinder service delivery to families of SED children, and suggestions for improvement to both.

1. What FDST training did you receive?
2. How did you perceive the training?
3. How did you view the trainers?
4. What contributed to your choice not to utilize supervision on a regular basis?

5. Were you able to utilize the assessment tool and/or FDST language with little or no supervision? If so, how?
6. Did the fact that FDST is being developed an evidence-based practice influence your utilization of the assessment tool? If so, how?
7. How did the fact that data collection was a part of utilizing the FDST and/or the assessment tool influence your utilization of the model?
8. How did this training fit with your pre-existing ideology, method of practice, and/or values?
9. How did billing structure versus the family focus of the model and assessment tool influence your utilization of the model?